



**HAPPY
NEW
YEAR**



Ronnie WA4MJF using the club call W4EOT, and Dr. Bob Conder K4RLC used the E-Comm trailer for the SET (Simulated Emergency Test) on November 27, 2004. See story and play by play action inside.



The Exciter

The **Exciter** is the monthly newsletter of the Raleigh Amateur Radio Society. It is available in both printed and electronic form. The printed version is mailed to members just before each club meeting. The electronic form, in Adobe Acrobat PDF format, is e-mailed about a week earlier.

We solicit both articles and advertising. The deadline for submissions is first Friday of the month or Friday after the monthly meeting. Contact the Editor.

The views contained in the Exciter are those of the individual authors, and are not necessarily the views of the Editor, or the Raleigh Amateur Radio Society.

The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the Amateur Radio community in the greater Triangle area. In 1999, we incorporated a new RARS, and obtained 501(c)(3) Non-Profit tax status.

The objectives of the club are to promote worldwide friend-ship through Amateur Radio; to be of public service by providing radio communications in times of disaster, emergency, or civic need; to educate members in radio technique; and to provide training classes to assist in obtaining Amateur Radio licenses.

Anyone interested in Amateur Radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18.00 per year (from July 1 through June 30). Additional immediate family members pay \$5.00 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12.00 per year. Dues for non-licensed Associate members are \$9.00 per year.

Applications for membership may be obtained from the treasurer, or the RARS web site (www.rars.org).

EXCITER EDITOR: **Denyse Walter**
 K4DAW
 919-468-5358
 k4daw@nc.rr.com



OFFICERS

PRESIDENT: **Andy Peterson NI4S**
 919-845-6251
 ni4s@arrl.net

VICE-PRESIDENT **Dick Bitner W8HYD**
 919-872-6802
 ncsol@bellsouth.net

SECRETARY: **Dick Orander KD4ISC**
 919-469-5322
 kd4isc@arrl.net

TREASURER: **Greg Seamster KE4PAX**
 919-859-0029
 ke4pax@arrl.net

RARS Repeaters in Raleigh:
145.13 (82.5 PL)
146.64
224.64 (Temporarily off the air)
444.525 (82.5 PL)

WEB SITE www.rars.org



PRESIDENT'S COMMENTS



First of all, a BIG thank you to everyone who helped make the holiday toy drive a success. It's great to see hams helping out in whatever way we can.

As we wrap up 2004 and start in on '05, thanks are due as well to everyone who's participated in RARS activities this past year. I think we've had some fun, been able to help out with some events, and learned some new skills and tricks ourselves along the way. It doesn't get much better than that!

Let's keep it up in 2005. If there's a new mode or activity you'd like to hear more about, let us know! An opportunity to help out in the community, to educate other hams, or an activity you think the club might like to sponsor? We're all ears.

Thanks for a great year!
73, Andy

*The Exciter goes to the printer the first Monday after the general meeting.
Electronic mailing is the same week.
Printing and mailing may vary.*

RALEIGH AMATEUR RADIO SOCIETY MEETINGS

Date: *Every first Tuesday of the Month*
Location: *Forest Hills Baptist Church, at Dixie Trail and Clark Avenue, in Raleigh*
Time: *7:30pm. Folks start showing up a bit before 7 to chat, brag and eat donuts.*

VE Testing: The RARS VEs will accept walk-in testing at the February, May, August and November RARS meetings, at the RARSfest in April, the Cary Swapfest in July and the JARSfest in November, and following RARS license classes. Please bring a photo ID, the original and a copy of your current license, plus any CSCEs you have for credit. Please refer to www.rars.org for more information.

The RARS 145.13 Repeater is waiting for YOU! PL 82.5 Tone

Announcements

NEXT RARS MEETING: January 4, 2004 Winter Weather-Tornados-Hurricanes

Time to think about the April 2005 Field Day. What are you planning on doing? A list of needs will be in the February Exciter.

Thank you so much for the generous contribution of toys for the White Dove Project in Florida. We received a total of 115 gifts.

NET REPORTS FOR NOVEMBER 2004

8:00PM DAILY: RARS Evening Net

Participants 464

Traffic 28/27

Time 722 minutes

Sessions 30

8:30PM SAT: Tech & Traders Net

9:00PM MON: SWL/SIG

Participants 48

Traffic 0/0

Time 393 Minutes

Sessions 9



RARS DINNER

Come join us on the **2nd** Tuesday of each month. We are currently meeting in the private dining room at the Golden Corral, 6129 Glenwood Avenue. People start arriving around 6:30 P.M., and things usually wind down by 8 P.M. or so. You can come whenever it's convenient for you. This gathering is open to anyone, RARS and non-RARS members, adults and children alike. Hope to see you there.

HAMFEST CALENDAR

January 8, 2005	Winston Salem
February 5	Charleston ARS, SC
February 26	Elkin, NC
February 20	Richmond, VA Frostfest
March 6	Kinston, NC
March 12-13	Charlotte, NC
March 26	Elkin, NC
April 9	Chesapeake, VA
April 16	Morganton, NC
April 17th Raleigh, NC--RARSFEST	
May 20-22	Dayton, OH
May 21	Williamston, NC
May 28*	Durham, NC
June 11	Winston-Salem, NC
June 25-26	FIELD DAY

Courtesy of the SERA Repeater Journal

*Date is not confirmed



LOOKing Back 30 Years

Taken from the January 1975 Exciter

The Greenville, NC repeater is on the air and coverage is about the same as WR4ABP in Grigston. The repeater is on 147.69/09 and is awaiting their permanent license. It is on the air under local control as WR4ACH/4. Normal operating times are on Monday through Friday in the daytime and Tuesday, Wednesday and Saturday nights.

The repeater autopatch is being watched by the FCC closely. For now, the amateur does not need to call someone to have that person call the police or fire department but can call himself.



LOOKing Back 10 Years

Taken from the January 1995 Exciter

Happy 65th anniversary to NCSU amateur radio club. W4ATC first appeared in the 1931 callbook. Stars (The Student Amateur Radio Society) plans special activities for later in the year. A planned exhibit on the club will appear in the library later in the year.

New Frequency for Wendell 6 meter repeater is on the air. The frequency is 29.620 with a standard - 100 khz input on 29.520. The initial approval to move was obtained from SERA.

North Carolina Section Amateur Radio Emergency Service

*Wake County-Durham County
Simulated Emergency Test (SET)*

November 20, 2004

*Post-operation review by Tom Brown N4TAB
EC Wake County*

Concept. In preparation for the annual SET, Wake County and Durham County ARES EC's planned another joint exercise to test individual county ARES readiness and cross-jurisdictional mutual-aid capabilities. Cooperation between these 2 groups is critical as the majority of the hospital capacity in the area is contained within those counties. The 2003 SET was also a 2-county event and involved an exercise involving the evacuation and transport of a major Wake County hospital's patients to hospitals in Durham County, owing to a contaminated cloud of effluvia resulting from an explosion near the hospital.

The 2004 SET was conceived to be a cyclonic weather event with a high number of communications interruptions "unscripted" with respect to timing. The intent was to have the participants act according to prior training and experience and work through the exercise "events". Much of the local area communications during ARES activations is conveniently conducted via strategically located repeaters throughout the area. Failure of these resources would require that participating ARES operators fall back to the lowest common denominator - simplex (single frequency) modes. This was casually mentioned in documents announcing the SET, in the days preceding.

Starting off with a problem. The SET was scheduled to commence at 0900 hours on Saturday, November 20, 2004, with a Skywarn announcement of a tornado in Durham County. As the first step, the event began early, with Durham EC John LeMay KG4WGA starting the operation a couple of minutes early and announcing touchdown of a tornado in Durham County. Thus began a particularly interesting and informative process.

Skywarn operators began filling-in with additional information and very realistic commentary, typical of a "real" event. Durham County announced activation at the request of Durham EM. Wake ARES was contacted and announced activation in support of Durham County. Then, a reported tornado in Wake County forced a change in focus as Wake County had to also support Wake EM.

Total failure of repeaters. Communications between Wake County and Durham County initiated on the PCRN 146.880 wide area repeater and, after a brief interval, the repeater failed (the hardware was shut down by Danny Hampton K4ITL), forcing stations to seek the backup repeater, 145.390.

(Continued on page 7)

About RARS Members

If you have a special event in your life please contact the Exciter editor and share the excitement.
Email: K4DAW@nc.rr.com.



Name: Greg Seamster, RARS Treasurer
Callsign: KE4PAX
Residence: Raleigh, NC

When did you become a ham and why: July, 1994. Co-workers were Hams, and I saw an opportunity to learn the radio technology and to provide public service.

What ham equipment do you own: An Alinco DJ-580 dual band handheld was purchased first, next a Kenwood TM-733 that I used as mobile and now use as a base station, and then a dual band Standard C5718DA that I use mobile. I also have a Yaesu FT-101E HF radio, but do not have HF privileges.

CW: Still need to learn the code. I have started to learn a couple of times, but have not dedicated enough time to learn.

Phone: 2m and 70cm

Contesting: What contest is your favorite: I have participated in Field Day which I enjoyed.

What hobby do you like besides ham radio: Computers and Antiques, including Antique Automobiles

Tell us something about yourself: I am a North Carolina native, a graduate of NC State University, and I enjoy attending events on the NCSU campus, including Basketball and Football games. After graduating from NCSU I worked for Nortel Networks for 16 years at their Technical Education Center.

I continue to provide training and lab support on Nortel equipment as an independent contractor through Innovatia Inc., a company that Nortel partnered with. Other work includes catering and food concessions at festivals and fairs from Massachusetts to Georgia. I also volunteer at the Triangle Reading Service by providing technical support on the computer equipment used for recording and playback of programming, as well as supporting the training of new volunteers to use the system.

Any other comments: One reason for getting into Ham radio was for public service. I have participated in a few public service events, but my work schedule which is often out of town and on weekends has limited my public service opportunities. As the RARS Treasurer, I have been able to support the amateur radio hobby.

TOTAL OF NEW MEMBERS
SIGNED UP IN 2004: 27.

Let's continue getting the word out that we have a fine club and lots of activities for everyone.



Bob Corns K4WC (SK) (see story on page 6.)



JANUARY MEMBER BIRTHDAYS

Chuck	K4HF	01/04
Jerry	KE4TTS	01/04
John	N4YRD	01/08
Jim	N4CAE	01/09
Beth	KF4QMR	01/09
Paul	KE4TMN	01/10
Woody	KJ4SO	01/13
Mike	KC4WUH	01/16
Del	KQ4MW	01/18
Johnnie	WA9SZL	01/19
Ashby	KB5ZIH	01/20
Kerrell	W4KGL	01/21
Craig	N4XOT	01/23
Alan	AB4OZ	01/30
Mark	W4MUB	01/30
Cyndi	KD4ACW	01/30

(Continued from page 4) SET on November 20, 2004

This repeater functioned for a few minutes and it, also, failed. ARES operations then moved to another wide area repeater - 147.195 and Skywarn moved to a 440 mHz network, according to their plan. Then, the 147.195 repeater failed, and the final repeater in the operations tree was sought. The 146.640 repeater was utilized for a brief interval, until it was also shut down. Now, the operators were, in a radio sense, in the dark.

Well, just go to simplex. The existing frequency plan mentioned moving to simplex, but was lacking in detail. Nonetheless, experienced operators "found" each other on common frequencies and began establishing communications within Wake County and into Durham County. The wide area coverage of the repeaters was missing and the short-range simplex operations did not afford the comfortable geographic margins usually encountered. Durham County also moved to simplex operation on the same frequency and, while convenient for inter-county work, this caused interference with intra-county communications

EOC in the weeds. In the interim, Skywarn continued to report severe weather, necessitating adaptation to changing circumstances. While an operator was enroute to the Wake County EOC in downtown Raleigh, Skywarn reported a microburst in the downtown area, with heavy rainfall. Immediately following, Wake ARES announced that the County EOC was flooded and unusable and that a backup EOC was being established at another location within the county. Ronnie Reams WA4MJF mobilized his Emergency Communications trailer W4EOT and deployed to the backup site at Wake Commons. David Crawford KF4VXJ and Bob Conder K4RLC assisted with set-up.

The W4EOT trailer arrived at Wake Commons, located a suitable spot from which to operate and began setup. The generator was started, antennas affixed and operations began. Owing to the geographic elevation of the Wake Commons site, direct simplex communications with Durham County was not possible, but traffic could be relayed via N4MQU.

At this point, Wake ARES AEC Mark Gibson N4MQU realized that simplex facilities in use at the time were not adequate and branched to an adaptive plan. He deployed to the residence of a nearby operator Vaden Holmes N4DIL and his high, tower-mounted simplex antenna. N4DIL had commenced operations in advance of Mark's arrival and was inundated with tactical traffic and relaying of messages.

NCEM gets into the act. The North Carolina Emergency Management's Central Branch EOC then activated in Butner, NC, requiring Amateur Radio Support. Currently, that office is in temporary quarters and without any fixed Amateur Radio infrastructure, requiring VHF/UHF and HF support from mobile equipment. An operator with suitable mobile equipment deployed from Wake County to the Butner (Granville County) EOC location and communications was established between Wake and Durham ARES operations via VHF/UHF simplex and with an Area 7 DEC via HF

Wrap-up and critique. Following stand-down of the SET, an on-air review and critique was conducted. The EC's commented on their perceptions and every participant was accorded the opportunity to comment and offer constructive criticism and suggestions. Most did so. In general, it was agreed that we got our job accomplished and also identified areas that need attention. It was clear from the comments received that, while this "was just a drill", all operators took their tasks very seriously and applied the same interest, effort and skills that have been evident in "real" activations in the past.

What we accomplished. Overall, the SET exercise accomplished its goals:

- Very realistic scenario, with Skywarn participation
- Multi-county, multi-jurisdiction operations
- Quick start-up
- Immediate insertion of problems with real hardware shutdown of repeaters
 - Abrogated backup communications plans via additional repeater shutdowns
 - Recognized that county-wide and inter-county use of simplex communications requires additional procedures to accomplish the same tasks
 - Identified the need for clear definition of additional procedures for simplex operations
 - Identified the need for additional training while using simplex frequencies

Where we go from here. Lessons learned from this exercise have resulted in some immediate actions and set the stage for future activities. Within a few hours following the completion of the SET, the Wake County ARES website, www.wakeares.org was updated to provide a short-form of basic radio procedures for activations and an update of the overall recommended repeater and simplex frequency list. We have also discussed this exercise on our weekly nets with a view to acquaint ARES participants with the lessons learned and the updated information and procedures.

All of this suggests that we will need to conduct additional exercises to gain experience and confidence in operating under similar, adverse conditions.

A BIG THANKS! to all of the operators that participated in this important exercise! We had participants from Wake, Durham, Cumberland and Nash Counties, all of whom contributed significantly to this drill. We worked together, and well, with a common purpose, and accomplished our tasks.

No effort was made to list all of the good folks that participated - only those who happened to be at mentioned point in time. Everybody worked hard and well.

Well Done, Everyone!

(Part 2 will be in the February Exciter. A play by play of the SET on November 20, 2004)

Contest Corner

There are some fun HF contests coming up in January!

North American QSO Party

CW: January 8-9 Phone: January 15-16

Both start at 2:00 PM local on Saturday and go until 2:00 AM Sunday, 12 hours.

This is a fun contest for a few reasons. The first is the exchange -- name and state. It adds a bit of a personal, friendly touch. Though if you're on CW and your name is Zebediah, you may consider sending something shorter. It's amazing how many CW ops are named "Ed" during this contest!

You can work a station again on a different band, which is neat. The 12-hour format means you can get on and find plenty of QSOs any time. The other aspect that makes this one more fun is that everyone is limited to 100 watts. The playing field gets leveled somewhat, though as we all know, not all antenna farms are created equal!

ARRL RTTY Roundup

January 8-9, starts 2:00 PM local Saturday, ends 8:00 PM local Sunday.

You can work a maximum of 24 out of the 30 hours.

An international digital (not just RTTY) event, fun for some digital DX. Send 599-NC, receive similar from US/Canadian hams, or 599 and a serial number from anyone else. There are some particular rules about band changes and off times, so visit www.arrl.org for more info.

North Carolina QSO Party

It's not too early to start thinking about this event, which will be the last weekend in February. Check out www.w4nc.org for more information. This would be a good event to do as a small group using W4DW if we can find a host station.

- Digital print-on-demand
- Both small and large format
- Color and black & white
- High-volume print solutions
- One-to-one marketing solutions
- Full service bindery and finishing

www.docusourceofnc.com

951 Aviation Parkway
Suite 600
Morrisville, NC 27560
919-459-5900

Centrally located in the heart of the Triangle!



relax; **docu**source it.

Minutes of the RARS General Meeting for December 2004

The December meeting of the Raleigh Amateur Radio Society was conducted on December 7, 2004 at the Forest Hills Baptist Church located on Dixie Trail. Members gathered and shared holiday refreshments and a few minutes of fellowship prior to the official start of the meeting.

President Andy Peterson, NI4S, called the meeting to order at 7:42pm.

Steve N0JVB was recognized and welcomed as a guest to the meeting.

The following announcements were made:

Andy, NI4S, thanked everyone for the toy and money donations made to the White Dove Project which will help the children of Florida affected by this year's hurricanes. Jim, K4FIJ, and Denyse Walter, K4DAW, will be transporting the toys to Florida next week.

A CERT training session will be conducted in Raleigh on December 17 through 19. Contact Bob Breyer, K1RCB, for additional information.

Charlie Brown, W4VFJ, reported the recent loss of long time RARS member Bob Corns, K4MC. He also passed along the thanks and appreciation of Bob's wife for the time members spent with Bob and their family in his final days.

Treasurer's Report

Greg Seamster, KE4PAX, reported there were 235 members of RARS

The floor was given to Chuck Littlewood, K4HF, for the installation of officers, board members and committee chairs elected during last month's meeting. Chuck read the following names of members and their elected positions and asked those present to step to the front to be installed.

Dick Bitner, W8HYD – Vice President

Greg Seamster, KE4PAX – Treasurer

Dick Orander, KD4ISC – Secretary

Gary Pearce, KN4AQ – Public Information Officer and FM Repeater Chair

Hank Montgomery, K4HM – RARS 2005 Hamfest Chair

Denyse Walter, K4DAW – RARS Exciter Editor and RARS Membership Chair

Mary Holtschneider, KG4OQA – RARS Net Manager

Johnnie Mayfield, WA9SZL – At-Large Director

Bob Breyer, K1RCB – At-Large Director

Selene Montgomery, KG4RMT – At-Large Director

Jim Walter, K4FIJ – At-Large Director

Chuck Littlewood, K4HF – ARRL Liaison

Jeff Wittich, AC4ZO – W4DW and W4RNC Trustee

Neal Fisher, N4HAF – RARS 2005 Field Day Chair

Liz, KO4CK and Joe White, WA4GIR – RARS Volunteer Exam Coordinators

Tim Nicholson, W4NOT – RARS Web Master

Chuck then asked all members who have served as officers, board members or committee chairs to stand and receive a round of applause and thanks from the membership for their work during this past year.

The floor was then given to Jeff Wittich, AC4ZO. Jeff presented Denyse Walter, K4DAW (former KG4CXR), with the 64 on 64 award. Denyse also earned the 64 RARS members and 128 contacts endorsements.

Program

Andy, NI4S, introduced The Encore Singers. They provided a festive and musical holiday presentation for the group to enjoy.

Door Prizes were won by W2JNW, K4HM and KD4ISC.

Attendance – 47.

Meeting was adjourned at 8:35pm.

Dick Orander KD4ISC

RARS Secretary



New board members for 2005



Jeff AC4ZO giving 64 on 64 award to Denyse K4DAW



Members feasting on the goodies



Encore singers performing

Photos by Gary KN4AQ, Steve KJ4BX & Jim K4FIJ

CERT (Community Emergency Response Team)

What is CERT

Why Is There a Need?

Each year, many North Carolina communities are rocked by severe weather such as hurricanes, tornadoes, floods or flash floods, winter storms or "man made" disasters.

The damage caused by such disasters affects everyone. Disasters: (1). Can severely restrict and overwhelm emergency response resources, communications, transportation and utilities; and (2). Can leave individuals and neighborhoods cut off from outside emergency support.

What Does the Course Involve?

The Community Emergency Response Team course consists of 21 hours of hands-on training. Classes are taught by emergency responders, including firefighters, emergency medical and law enforcement personnel, from your community.

The course agenda includes:

Unit 1 EMERGENCY PREPAREDNESS

Introduction to disasters, impact of disasters on infrastructures, the role of CERTs in disaster response.

Unit 2 FIRE SAFETY

Identifying and reducing potential fire hazards, basic fire suppression strategy, resources and techniques.

Unit 3 EMERGENCY MEDICAL OPERATIONS, PT. 1

Treatment strategies for life-threatening conditions and principles of triage.

Unit 4 EMERGENCY MEDICAL OPERATIONS, PT 2

Head-to-toe assessments, treatment for various injuries

Unit 5 LIGHT SEARCH AND RESCUE OPERATIONS

Techniques for size-up and search, lifting, cribbing and removing victims, rescuer safety

Unit 6 CERT ORGANIZATION

Team organization, decision making, documentation

Unit 7 DISASTER PSYCHOLOGY

Team well-being, working with survivors' trauma

Unit 8 TERRORISM AND CERT

Terrorist targets and weapons, preparing home and work. The target audiences for this course are private citizens, businesses and schools that want the skills and knowledge required to prepare for and respond to a disaster.

(Classes are given regularly. Please take a class when offered.)

Target Your Market

Our Complete Line of Direct Mail and Printing Services Include:

- Custom Design & Layout
- Mailing Labels
- Inserting - Metering
- Professional Printing
- Ink Jet Addressing
- Hand Signatures
- Mailing Lists
- Residential & Commercial
- Sorting - Folding
- *Personal Service*

**One-Stop
Shopping
Convenience**

HPM
HIGH PERFORMANCE MARKETING

"For All Your Direct Mail & Printing Needs"

919-870-9915

J. Jay Langley
PO Box 97744
Raleigh, NC 27624
fax: 919-844-0871
PostcardS@bellsouth.net



**The Central Carolina
Skywarn Net Meets
Tuesdays at 9:15 PM
on 146.88 Repeater**

NEWS

Winter Weather
Conference held
On November 20



WRAL meteorologist Greg Fishel
talks to emergency coordinators.



Virginia NC4VA and Kermit from
the NWS discussing hurricane
damage from this summer.

SKYWARN RECOGNITION DAY

December 4, 2004 was the SRD (Skywarn Recognition Day) sponsored by the National Weather Services offices around the world. Raleigh participated with IRLP, HF and the local 146.88 repeater. The object: For all amateur stations to exchange QSO information with as many National Weather Service Stations as possible on 80, 40, 20, 15, 10, 6 and 2 meter bands plus the 70 centimeter band. Contacts via repeaters are permitted. Skywarn Recognition Day serves to celebrate the contributions to public safety made by amateur radio operators during threatening weather.

Thanks to all those that helped at the NWS:

Mark K4MQU, Virginia NC4VA, Tim W4NOT, Jim KB4BZ, Rick K4RLE, Jim K4FIJ, Rick AJ9F/4, Skip N6LUZ and Denyse K4DAW.

A special thanks to Dick W8HYD for supplying the HF rig for use. Jeff Orrock and Darin from the NWS supplied the pizzas for lunch. Thank you.

The SRD is on the first weekend of December each year. We hope you can take part next year.



Dick W8HYD, Tim W4NOT, Jim KB4BZ and Jeff Or-
rock NWS Severe Weather Warning Meteorologist
working 20 meters.



Jim K4FIJ, Denyse K4DAW, Rick AJ9F/4, Skip
N6LUZ, Jeff NWS meteorologist, Virginia NC4VA,
Dick W8HYD on IRLP and 146.88

Photos by Denyse K4DAW

WINTER WEATHER CONFERENCE 2004



CONGRATU- LATIONS DANNY

Left:
Danny Hampton
KI4TL received
NOAA Natural
award of the month
for tower and re-
peater maintenance.
The award was
given by Bryan
Campbell & Steve
Harnett. This is a
very special award
and was presented
at the Winter
Weather Confer-
ence on November
20, 2004



The Winter Weather Conference was attended by meteorologists, city and county coordinators, and hams from Central Carolina and Triad Skywarn.

Photo by Denyse K4DAW